

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the amendments above and the following remarks.

Status of Claims

Claims 1-30 are currently pending in the application of which claims 1, 21, and 30 are independent.

In the amendments above, claims 1, 10, 21, and 30 are amended. Support for the amendments to claims 1, 10, 21, and 30 may at least be found in paragraph 20 of the original filed Specification.

Accordingly, no new matter has been introduced by the above-amendments. Entry thereof is therefore respectfully requested.

Summary of the Office Action

The Response to Arguments presented in the Office Action is considered moot in light of the amendments above to independent claims 1, 21, and 30.

Claims 1-7, 10-16, 21-25, and 30 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Application Publication No. 2005/0017924 to Utt et al. in view of U.S. Patent No. 6,690,814 to Yuasa et al.

Claims 17-20, 28, and 29 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Utt et al. in view of Yuasa et al. and further in view of U.S. Patent Application Publication No. 2006/0187305 to Trivedi et al.

Claims 8 and 9 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Utt et al. in view of Yuasa et al. and further in view of U.S. Patent No. 6,771,237 to Kalt.

The aforementioned rejections are respectfully traversed for at least the following reasons.

Drawings

The Office Action fails to indicate whether the Drawings submitted on January 28, 2004 have been approved. However, because the Office Action does not contain any specific objections to the drawings, the drawings are considered to have been approved by the Examiner.

Claim Rejection Under 35 U.S.C. §103

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S., 82 USPQ2d 1385 (2007):

“Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” Quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, “[a]ll claim limitations must be considered” because “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re*

Wilson, 424 F.2d 1382, 1385. According to the Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72, No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are resolved, there must be a determination of whether the claimed invention would have been obvious to one of ordinary skill in the art based on any one of the following proper rationales:

(A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006), “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasonings with some rational underpinning to support the legal conclusion of obviousness.”

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

Claims 1-7, 10-16, 21-25, and 30

Claims 1-7, 10-16, 21-25, and 30 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Utt et al. in view of Yuasa et al. This rejection is respectfully traversed for at least the following reasons.

Independent claim 1, as amended, pertains to an apparatus for displaying facial features of a remote person. The apparatus includes an image generation device that creates an image with the remote person's facial features, in which, the image is communicated by an image collection device configured to track the remote person's direction of gaze. The apparatus also includes a positioning system that moves the image on the nonplanar surface to indicate changes in the direction of gaze and enhance nonverbal communication associated with the facial features of the remote person.

Independent claim 21, as amended, pertains to a method for displaying facial features of a remote person. In the method, communications from an image collection device are received, in which, the communications include information pertaining to the remote person's direction of gaze. In addition, an image with the remote person's facial features is generated on a nonplanar surface and the image is moved on the nonplanar surface to indicate changes in the direction of gaze and enhance nonverbal communication associated with the facial features of the remote person.

Independent claim 30, as amended, pertains to an apparatus for displaying facial features of a remote person. The apparatus includes means for receiving communications from an image collection device, in which the communications include information pertaining to the remote person's direction of gaze. The apparatus also includes means for displaying an image on a nonplanar surface, means for generating the remote person's facial

features in the image on the nonplanar surface, and means for moving the image to indicate changes in the direction of gaze and enhance nonverbal communication associated with the facial features of the remote person.

The Office Action asserts that Utt et al. discloses all of the features of independent claims 1, 21, and 30 except for positioning an image on a non-planar surface to indicate a direction of gaze and enhance nonverbal communication associated with the facial features. The Office Action also asserts that Yuasa et al. makes up for this deficiency. As will become clearer from the following discussion, Utt et al. fails to disclose additional features that Yuasa et al. fails to cure.

Initially, Utt et al. fails to disclose that an image with a remote person's facial features is created on a nonplanar surface and that the image is moved to indicate changes in the direction of the remote person's gaze as now claimed in independent claims 1, 21, and 30. Although Utt et al. discloses in Figure 11E, a display surface having the shape of a person's head 151, Utt et al. fails to disclose that the displayed image is moved to indicate changes in the direction of the remote person's gaze whose facial features are displayed on the nonplanar surface.

Yuasa et al. fails to cure these deficiencies in Utt et al. In fact, Yuasa et al. does not even pertain to the display of facial features on a nonplanar surface. Instead, Yuasa et al. pertains to an image processing apparatus configured to execute pattern extraction processing in image pattern recognition process. *Yuasa et al.*, column 3, lines 1 and 2. In other words, Yuasa et al. pertains to obtaining an image of the faces of one or more people for the purpose of automatically recognizing the people in the image. In performing this operation, Yuasa et al. discloses a gaze direction recognition apparatus. Column 8, lines 34-45. Although the

gaze direction recognition apparatus is disclosed as recognizing the gaze direction of a person whose image is being captured, Yuasa et al. fails to disclose that the recognized gaze direction is employed for any purpose other than identifying the one or more persons contained in an image. Thus, Yuasa et al. fails to disclose that an image of a remote person is displayed on a nonplanar surface and that the image is moved to indicate changes in the gaze direction of the remote person as claimed in independent claims 1, 21, and 30.

Accordingly, even assuming for the sake of argument that one of ordinary skill in the art were somehow motivated to combine the disclosures contained in Utt et al. and Yuasa et al. as proposed in the Office Action, the proposed combination would still fail to disclose all of the features claimed in independent claims 1, 21, and 30.

For at least the foregoing reasons, the Office Action has failed to establish that independent claims 1, 21, and 30 are *prima facie* obvious in view of the proposed combination of Utt et al. and Yuasa et al. The Examiner is therefore respectfully requested to withdraw the rejection of claims 1, 21, and 30 and to allow these claims.

Depending claims 2-7, 10-16, and 22-25 are allowable over the proposed combination of Utt et al. and Yuasa et al. for reasons in addition to their respective dependencies upon allowable independent claims 1 and 21. For instance, with respect to claim 12, neither Utt et al. nor Yuasa et al. discloses that the positioning system moves the image and eyes contained in the image from one part of the nonplanar surface to another in conjunction with movement of the facial features gathered with the image collection device. As another example, with respect to claim 13, neither Utt et al. nor Yuasa et al. discloses that the claimed apparatus includes one or more video collection devices for collecting video images of facial features from a perspective substantially on or near the nonplanar surface. As a further example, with

respect to claim 14, neither Utt et al. nor Yuasa et al. discloses that the one or more video collection devices includes a camera device, and the perspective substantially on or near the nonplanar surface includes mounting the camera device substantially near a set of eyes appearing on the nonplanar surface. Furthermore, both Utt et al. and Yuasa et al. fail to disclose the features of claims 15 and 16.

Claims 17-20, 28, and 29

Claims 17-20, 28, and 29 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Utt et al. in view of Yuasa et al. and further in view of Trivedi et al. This rejection is respectfully traversed for at least the following reasons.

As discussed above, the proposed combination of Utt et al. and Yuasa et al. fails to disclose all of the features of independent claims 1 and 21. More particularly, for instance, the proposed combination of Utt et al. and Yuasa et al. fails to disclose that an image of a remote person is displayed on a nonplanar surface and that the image is moved to indicate changes in the gaze direction of the remote person as claimed in independent claims 1 and 21.

The Office Action cites to Trivedi et al. as disclosing “a speaker transmitting voice and other sound using microphones.” *Office Action*, page 8, lines 3 and 4. As such, the Office Action has not and cannot reasonably assert that Trivedi et al. makes up for any of the deficiencies in Utt et al. and Yuasa et al. discussed above. Accordingly, even assuming for the sake of argument that one of ordinary skill in the art were somehow motivated to combine Utt et al., Yuasa et al., and Trivedi et al. as suggested in the Office Action, the

proposed combination would still fail to yield all of the features of independent claims 1 and 21.

For at least the foregoing reasons, the Office Action has failed to establish that claims 17-20, 28, and 29 are *prima facie* obvious in view of the combined disclosures contained Utt et al., Yuasa et al., and Trivedi et al. The Examiner is therefore respectfully requested to withdraw the rejection of claims 17-20, 28, and 29 and to allow these claims.

Claims 8 and 9

Claims 8 and 9 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Utt et al. in view of Yuasa et al. and further in view of Kalt. This rejection is respectfully traversed for at least the following reasons.

As discussed above, the proposed combination of Utt et al. and Yuasa et al. fails to disclose all of the features of independent claim 1. More particularly, for instance, the proposed combination of Utt et al. and Yuasa et al. fails to disclose that an image of a remote person is displayed on a nonplanar surface and that the image is moved to indicate changes in the gaze direction of the remote person as claimed in independent claim 1.

The Office Action cites to Kalt as disclosing “an image generation method using a flexible display.” *Office Action*, page 9, lines 11 and 12. As such, the Office Action has not and cannot reasonably assert that Kalt makes up for any of the deficiencies in Utt et al. and Yuasa et al. discussed above. Accordingly, even assuming for the sake of argument that one of ordinary skill in the art were somehow motivated to combine Utt et al., Yuasa et al., and Kalt as suggested in the Office Action, the proposed combination would still fail to yield all of the features of independent claim 1.

For at least the foregoing reasons, the Office Action has failed to establish that claims 8 and 9 are *prima facie* obvious in view of the combined disclosures contained Utt et al., Yuasa et al., and Kalt. The Examiner is therefore respectfully requested to withdraw the rejection of claims 8 and 9 and to allow these claims.

Conclusion


In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below.

Please grant any required extensions of time and charge any fees due in connection with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: April 28, 2009

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